

[Federal Register: April 21, 2003 (Volume 68, Number 76)]  
[Rules and Regulations]  
[Page 19328-19330]  
From the Federal Register Online via GPO Access [wais.access.gpo.gov]  
[DOCID:fr21ap03-3]

---

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. 2003-NM-88-AD; Amendment 39-13121; AD 2003-06-51]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Learjet Model 45 Airplanes**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule; request for comments.

---

**SUMMARY:** This document publishes in the Federal Register an amendment adopting airworthiness directive (AD) 2003-06-51 that was sent previously to all known U.S. owners and operators of certain Learjet Model 45 airplanes by individual notices. This AD requires an inspection to determine the part number of the horizontal stabilizer actuator assembly (A66), and replacement of any suspect horizontal stabilizer actuator assembly (A66) with a new or serviceable actuator assembly (A66). This action is prompted by a report of severe vibration followed by a rapid nose down pitch change on a Learjet Model 45 airplane. The actions specified by this AD are intended to prevent structural failure of the horizontal stabilizer actuator assembly, which could result in possible loss of control of the airplane.

**DATES:** Effective April 28, 2003, to all persons except those persons to whom it was made immediately effective by emergency AD 2003-06-51, issued on March 20, 2003, which contained the requirements of this amendment.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of April 28, 2003.

Comments for inclusion in the Rules Docket must be received on or before June 20, 2003.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2003-NM-88-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227-1232. Comments may also be sent via the Internet using the following address: 9-anm-iarcomment@faa.gov. Comments sent via fax or the Internet must contain "Docket No. 2003-NM-88-AD" in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 or 2000 for Windows or ASCII text.

The applicable service information may be obtained from Learjet, Inc., One Learjet Way, Wichita, Kansas 67209-2942. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** David Hirt, Aerospace Engineer, Systems and Equipment Branch, ACE-116W, FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas 67209; telephone (316) 946-4156; fax (316) 946-4407.

**SUPPLEMENTARY INFORMATION:** On March 20, 2003, the FAA issued emergency airworthiness directive (AD) 2003-06-51, which is applicable to certain Learjet Model 45 airplanes.

## **Background**

The FAA has received a report of severe vibration followed by a rapid nose down pitch change on a Learjet Model 45 airplane. Investigation revealed that the acme screw of the horizontal stabilizer actuator assembly was fractured. The actuator features a dual load path. The actuator assembly's primary load path, the acme screw, failed. Loads should have been retained by the secondary internal retaining rod. However, the threaded nut on the secondary internal retaining rod had worked completely off, either latently before the fracture or from the effects of the fractured screw. The cause of such failure has not been determined.

There have been no previous reports of fractured acme screws of the horizontal stabilizer actuator assembly. However, there have been reports of cracks in the acme screw. As a result of these reports, the acme screw design was changed in February 2000 to reduce the probability of crack initiation. The fractured acme screw was an early design that did not have the design improvements incorporated to reduce the probability of crack initiation.

Structural failure of the horizontal stabilizer actuator assembly could result in possible loss of control of the airplane.

## **Explanation of Relevant Service Information**

The FAA has reviewed and approved Bombardier Learjet Alert Service Bulletin SB A45-27-15, dated March 20, 2003, including Service Bulletin Compliance Response, which describes procedures for performing an inspection to determine the part number (P/N) of the horizontal stabilizer actuator assembly (A66), and replacing any horizontal stabilizer actuator assembly (A66) having P/N 6627401000-001 or P/N 2A9200F with a new or serviceable actuator assembly (A66) having P/N 6627401000-005. Accomplishment of the actions specified in the alert service bulletin is intended to adequately address the identified unsafe condition.

## **Explanation of Requirements of the Rule**

Since the unsafe condition described is likely to exist or develop on other airplanes of the same type design, the FAA issued emergency AD 2003-06-51 to prevent structural failure of the horizontal stabilizer actuator assembly, which could result in possible loss of control of the airplane. The AD requires an inspection to determine the P/N of the horizontal stabilizer actuator assembly (A66), and replacement of any horizontal stabilizer actuator assembly (A66) having P/N 6627401000-001 or P/N 2A9200F with a new or serviceable actuator assembly (A66) having P/N 6627401000-005. The actions are required to be accomplished in accordance with the alert service bulletin described previously.

## **Changes to 14 CFR Part 39/Effect on the AD**

On July 10, 2002, the FAA issued a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs the FAA's AD system. The regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance. This material is included in part 39. However, as amended, part 39 provides for the FAA to add special requirements for operating an airplane to a repair facility to do the work required by an AD. For purposes of this emergency AD, we have determined that such a special flight permit is permitted, but with certain limitations.

## **Determination of Rule's Effective Date**

Since it was found that immediate corrective action was required, notice and opportunity for prior public comment thereon were impracticable and contrary to the public interest, and good cause existed to make the AD effective immediately by individual notices issued on March 20, 2003, to all known U.S. owners and operators of certain Learjet Model 45 airplanes. These conditions still exist, and the AD is hereby published in the Federal Register as an amendment to section 39.13 of the Federal Aviation Regulations (14 CFR 39.13) to make it effective to all persons.

## **Comments Invited**

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified under the caption ADDRESSES. All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2003-NM-88-AD." The postcard will be date stamped and returned to the commenter.

## **Regulatory Impact**

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an

emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

### **PART 39—AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### **§ 39.13 [Amended]**

2. Section 39.13 is amended by adding the following new airworthiness directive:

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

*We post ADs on the internet at "www.faa.gov"*

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

**2003-06-51 Learjet:** Amendment 39-13121. Docket 2003-NM-88-AD.

**Applicability:** Model 45 airplanes, serial numbers 45-001 through 45-232 inclusive; certificated in any category.

**Compliance:** Required as indicated, unless accomplished previously.

To prevent structural failure of the horizontal stabilizer actuator assembly, which could result in possible loss of control of the airplane, accomplish the following:

## **Inspection**

(a) Before further flight, do an inspection to determine the part number (P/N) of the horizontal stabilizer actuator assembly (A66), per paragraph 2., "Accomplishment Instructions," of Bombardier Learjet Alert Service Bulletin SB A45-27-15, dated March 20, 2003, excluding Service Bulletin Compliance Response.

## **Corrective Action**

(b) If a horizontal stabilizer actuator assembly (A66) having P/N 6627401000-001 or P/N 2A9200F is found installed during the inspection required by paragraph (a) of this AD, before further flight, replace the horizontal stabilizer actuator assembly (A66) with a new or serviceable actuator assembly (A66) having P/N 6627401000-005, per paragraph 2., "Accomplishment Instructions," of Bombardier Learjet Alert Service Bulletin SB A45-27-15, dated March 20, 2003, excluding Service Bulletin Compliance Response.

## **Parts Installation**

(c) As of the effective date of this AD, no person shall install any horizontal stabilizer actuator assembly (A66) having P/N 6627401000-001 or P/N 2A9200F, on any airplane.

## **Special Flight Permit**

(d) Special flights may be issued for flights limited to required flight crew only, per sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

## **Alternative Methods of Compliance**

(e) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Alternative methods of compliance for this emergency AD will be approved by the Manager, Wichita Aircraft Certification Office (ACO), FAA. Contact David Hirt, Wichita ACO, FAA, for information about previously approved alternative methods of compliance.

## **Incorporation by Reference**

(f) The actions shall be done in accordance with Bombardier Learjet Alert Service Bulletin SB A45-27-15, dated March 20, 2003, excluding Service Bulletin Compliance Response. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Learjet, Inc., One Learjet Way, Wichita, Kansas 67209-2942. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

## **Effective Date**

(g) This amendment becomes effective on April 28, 2003, to all persons except those persons to whom it was made immediately effective by emergency AD 2003-06-51, issued on March 20, 2003, which contained the requirements of this amendment.

Issued in Renton, Washington, on April 11, 2003.

Ali Bahrami,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 03-9430 Filed 4-18-03; 8:45 am]

BILLING CODE 4910-13-P